010

REPORT ON THE MAGNETOMETER SURVEY

EAST EBY PROPERTY, EBY TOWNSHIP

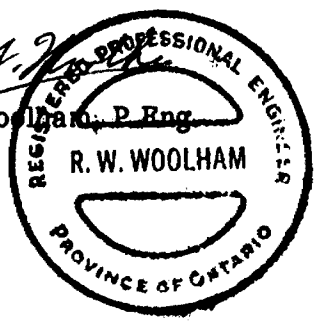
NTS 42A/1

PREPARED FOR

BUTTE CANYON RESOURCES INCORPORATED

DERRY, MICHENER, BOOTH & WAHL

R. W. Woolham, P.Eng.



Toronto, Ontario
December 29, 1987

Ref: 87-114

TABL

010C

LIST OF FIGURES

LIST OF MAPS
(In Map Pocket)

87-114-01: Total Field Magnetic Survey, Main Block (values), Scale 1:5,000

87-114-02: Total Field Magnetic Survey, Main Block (contours), Scale 1:5,000

87-114-03: Total Field Magnetic Survey, North Block (values), Scale 1:5,000
Total Field Magnetic Survey, North Block (contours), Scale 1:5,000

INTRODUCTION

A geophysical survey, utilizing the magnetic method was completed on the East Eby property of Butte Canyon Resources Incorporated. The survey was performed by the staff of Derry, Michener, Booth & Wahl (DMBW) under the direct supervision of the author. The survey was conducted during the period October 15 to October 31, 1987. This work was part of an exploration program recommended by DMBW in a report of April 15, 1987. This report is for assessment credits and a technical data statement is contained in Appendix 1.

PROPERTY LOCATION, DESCRIPTION AND ACCESS

The East Eby property is located in Eby Township, about 12 km southwest of the town of Kirkland Lake and about 5 km southeast of Kenogami Lake as shown in Figure 1. The property consists of the following 31 unpatented mining claims in two contiguous blocks covering about 496 hectares (Figure 2).

Main Block Claim Numbers	Date of Record
L 735464	07/03/84
L 735596 to 735598 incl.	07/03/84
L 738544 to 735548 incl.	07/03/84
L 738577	07/03/84
L 738858	09/03/84
L 802126	28/03/85
L 842693	29/04/85
L 842694 to 842695	12/12/85
L 891900	27/05/86
L 891901	28/07/86
L 891902	30/07/86
L 891903	21/11/86
L 891905	27/05/86
L 891906	30/07/86
L 891907 to 891909 incl.	28/07/86
L 980065 to 980069 incl.	07/04/87
North Block	
L 802124	27/03/85
L 802125	27/03/85

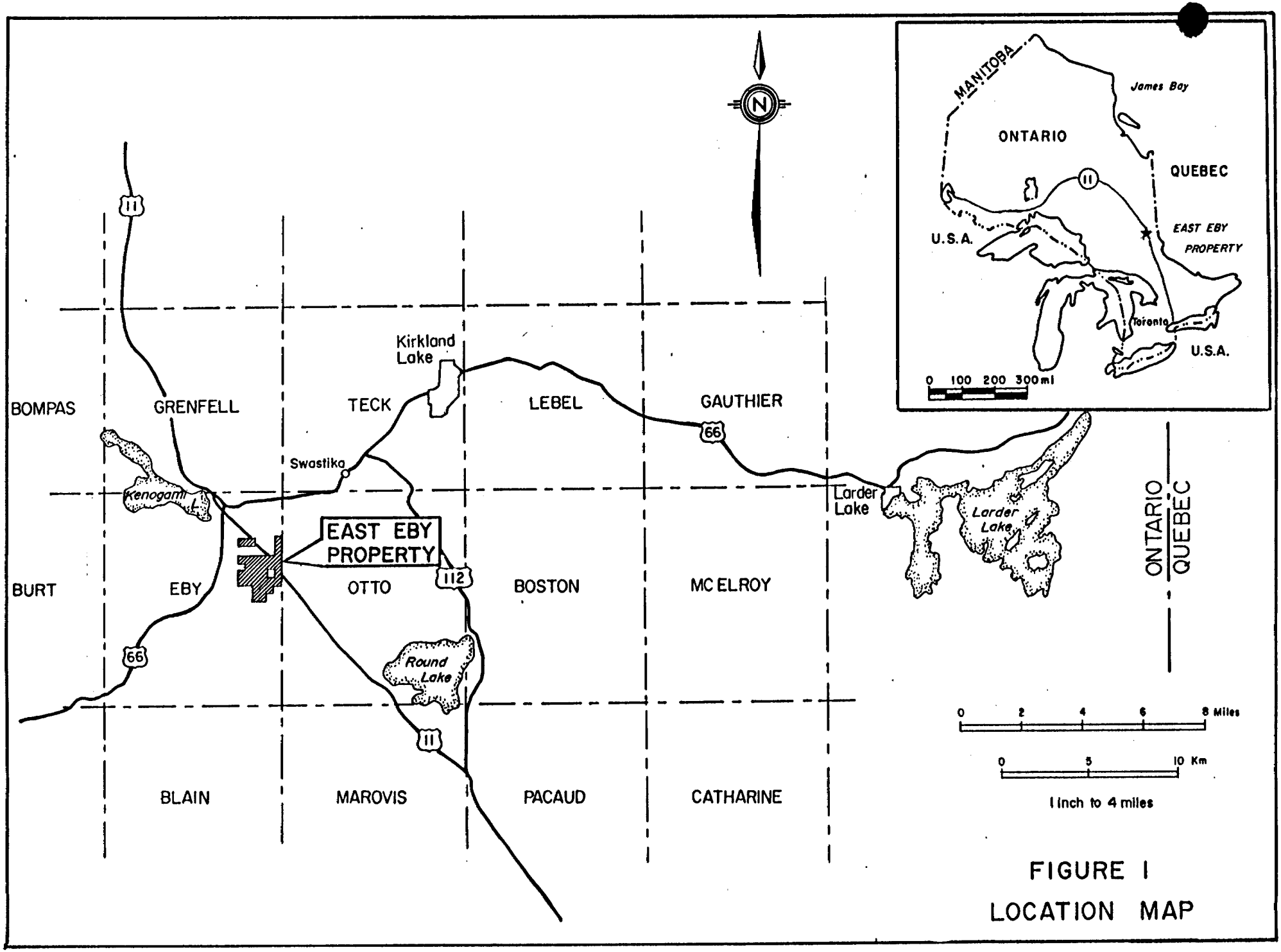
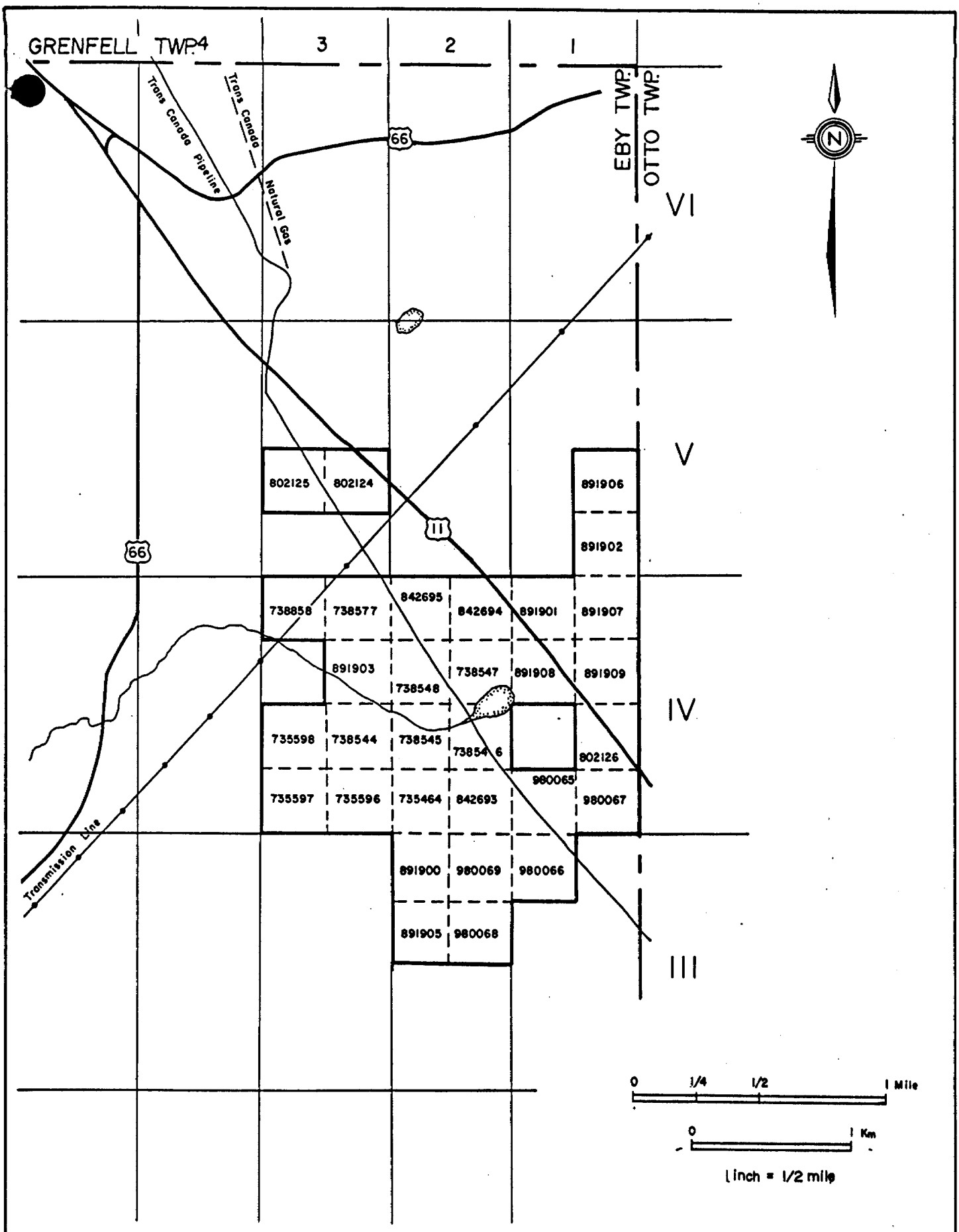


FIGURE 1

LOCATION MAP



NOTE:
All claim numbers prefixed by letter "L".

FIGURE 2
CLAIM MAP

DMBW has not examined title to the claims nor substantiated their physical boundaries and, accordingly, expresses no opinion as to validity of title and property description.

Access to the property is excellent. Highway 11 crosscuts the northeast corner of the property and there are bushroads and trails which lead to the other sections. In addition, a wide clearing for the Trans-Canada Pipeline crosscuts the centre of the property, providing excellent mobility.

GEOLOGY

Essentially all of the consolidated rocks in the Kirkland Lake area are of Precambrian age. Proterozoic formations consist of Gowganda Formation sediments of the Cobalt Group, and two generations of diabase dykes. The more areally extensive Archean stratigraphy in the area can essentially be divided into four major stratigraphic categories:

(1) Pre-Timiskaming, Skead Group, mafic to felsic flows and pyroclastics, chemical sediments and local ultramafic flows and intrusives.

(2) Timiskaming Group fine- to coarse-grained clastic metasediments, chemical metasediments, alkaline flows, tuffs and breccias, felsic volcanics and komatiic (ultramafic) flows.

(3) Post-Timiskaming Highway 11 basalts and local komatiites (Kenojevis Group).

(4) Various gabbroic, syenitic and granitic intrusives.

The East Eby property is underlain by a northeast striking, subvertically dipping sequence of felsic to mafic volcanics and volcanogenic sediments intruded by various types of plutonic units.

Based on government mapping, a major unit consisting dominantly of felsic flows and pyroclastics and iron formation horizons transgresses the property from the northeast to the southwest. Two diamond drill holes collared in the unit indicate that the package also contains impure medium to coarse-grained sandstones, arkose horizons and a cherty, aphanitic, iron-poor equivalent to an iron formation. The bottom half of one drill hole dominantly consists of a komatiite flow structurally overlying a thick komatiitic sediment. These units probably represent the basal succession of the Highway 11 Basalts. Both oxide and sulphide facies iron formations, having association with gold mineralization, exist on the property.

Based on regional mapping, there are three types of intrusive rocks on the property: early mafic to ultramafic stocks, dykes and sills; late Archean felsic intrusives, presumably part of the Round Lake Batholith; and the late Archean alkalic Otto stock. Proterozoic diabase dykes undoubtedly crosscut portions of the property.

SURVEY PARAMETERS AND PRESENTATION

Magnetic Survey

A Scintrex IGS-2 with an MP-4 total field proton magnetometer sensor was used for the survey. This instrument is microprocessor-controlled and can be programmed to automatically record the station location, time and magnetic value. Magnetic diurnal variations were monitored by a Scintrex MP-3 magnetic base station. Instrument specifications are contained in Appendix 2. Readings were taken along grid lines spaced 100 m apart at 25 m station intervals. In all, 40 line km of data were recorded and stored automatically for a total of 1,600 readings.

Diurnal corrections to the magnetic field values recorded were automatically calculated by the microprocessor-controlled base station recorder after the field data was "dumped" into the data storage device at the end of each day's data collection.

Office compilation by DMBW consisted of the editing of the data and production of floppy disc files for automatic entry of the data values into a computer controlled plotting system. Using modified software by dataplotting, survey maps of magnetic values and contours, at an interval of 100 nT, were generated at a scale of 1:5,000 with appropriate title and legend (see maps 87-114-01, -02, -03, -04).

RESULTS AND CONCLUSIONS

Main Block

The background total field magnetic value in the area is about 58,750 nT. Magnetic anomalies from approximately 250 to over several thousand nT above background are present on the property with below background values occurring within the same order-of-magnitude.

The most striking feature is a very high amplitude response in the southern part of the grid. It forms two parallel zones trending onto the property from the south and west in a north-northeast direction. Previous drilling in the area intersected iron formation and one outcrop of iron formation underlies a portion of the anomaly complex.

Along the southeast side of the claim group there is a broad area of high amplitude magnetic responses. The northern part of this area is underlain by syenite, and no doubt, is the source of the magnetic responses in this area.

In the northwest third of the survey area, the magnetic patterns are more erratic and contorted. Just to the east of this area on line 200 west, north of the baseline, there are a series of alternating high amplitude negative and positive anomalies which are cross-cut by more regionally trending northeast magnetic linears. Based on government 1" = 1/4 mile mapping, portions of all of these erratic anomalous areas are underlain by basalt, andesite, mafic tuff and gabbro. Specific correlation of the higher amplitude areas with underlying late gabbro

units occurs in several locations and probably indicates that the main magnetic unit is a gabbro although a one-to-one relationship between high magnetic amplitudes and gabbro outcrop is not always present. The area is crosscut with mafic dykes which also probably complicate the magnetic signatures seen.

In addition to the areas thought to reflect magnetic gabbros, there are extensive below background magnetic areas in the west part of the survey area. Part of these larger areas of background to below background magnetic responses may be related to nonmagnetic andesites and agglomerates that have been mapped in the area.

The anomaly patterns suggest that several fault structures may be present. A major north-northwest break appears to bisect the property while more subtle east-west trending structures are evident in the west part of the area.

North Block

The magnetic amplitude variations are similar to those seen in the Main block. The western quarter of the grid is dominated by a high amplitude area from which extends an east trending high amplitude zone. This zone is in the northern part of the grid area. Basalts and felsic intrusives of syenite are mapped in this area but the high amplitude magnetic zones suggest that either iron formation or mafic phases of the intrusives are more likely to be present rather than felsic intrusives.

RECOMMENDATIONS

The iron formations in the area are known to have an association with gold mineralization. Areas of alteration associated with sulphide iron formation and magnetite/hematite iron formation may occur in structurally complex areas of faulting and folding. Such areas may be recognized from their magnetic/conductive characteristics and, if outcrop exposure exists, from their alteration products and detailed mapping. Additional geophysics, consisting of electromagnetic surveys in conjunction with a mapping and sampling program, formed the basis of recommendations made by DMBW in their report of April 15, 1987 on the property. The electromagnetic surveys are completed and are in the process of being evaluated. A detailed program of mapping and prospecting is planned for the next field season at which time further recommendations relating to drill testing of favourable exploration targets can be made.

CERTIFICATE OF QUALIFICATION

I, Roderick W. Woolham of the town of Pickering, Province of Ontario, do hereby certify that:-

1. I am a geophysicist and reside at 1463 Fieldlight Blvd., Pickering, Ontario, L1V 2S3.

2. I graduated from the University of Toronto in 1961 with a degree of Bachelor of Applied Science, Engineering Physics, Geophysics Option.

3. I am a member in good standing of the following organizations: The Association of Professional Engineers of the Province of Ontario (Mining Branch); Society of Exploration Geophysicists; South African Geophysical Association.

4. I have been practising my profession for a period of more than 25 years.

5. I am an Associate with Derry, Michener, Booth & Wahl, Consulting Geologists and Engineers.

6. I have not received, nor do I expect to receive, any interest, directly or indirectly, in the properties or securities of Butte Canyon Resources Incorporated or any affiliate.

7. I personally was involved with the technical supervision of the survey and wrote the report.

8. I consent to the use of this report in submissions for assessment credits and for similar regulatory requirements.

R. W. Woolham, P.Eng.

REGISTERED PROFESSIONAL ENGINEER
R. W. WOOLHAM
PROVINCE OF ONTARIO

Toronto, Ontario
December 29, 1987

Dual
63.1718

APPENDIX 1

TECHNICAL DATA STATEMENT

Ontario

Ministry of Natural Resources

File _____

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) Magnetic

Township or Area E by Twp.

Claim Holder(s) Butte Canyon Resources Inc.
Suite 500, 67 Richmond St W., Toronto

Survey Company Derry Michener Booth & Wahl

Author of Report R.W. Woolham

Address of Author Suite 410, 20 Richmond St. E. Toronto

Covering Dates of Survey Sept 1 to Oct 31, 1987
(linecutting to office)

Total ~~Miles~~ of Line Cut ~ 46 Km.

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	
–Magnetometer	40
–Radiometric	
–Other	
Geological	
Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: Dec. 29/87 SIGNATURE: R.W. Woolham
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
L	735464
	735596
	597
	598
	738544
	545
	546
	547
	548
	577
	858
	802 124
	125
	126
	892693
	694
	695
	891900
	901
	902
	903
	905
	906
	907
	908
	909
	980065
	066
	067
	068
	069

If space insufficient, attach list

TOTAL CLAIMS 31

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Number of Stations 1600 Number of Readings 1600

Station interval 25 m Line spacing 100 m

Profile scale

Contour interval 100 nT

MAGNETIC

Instrument See Instrument Specification Appendix 2 of this report.

Accuracy – Scale constant

Diurnal correction method

Base Station check-in interval (hours)

Base Station location and value

ELECTROMAGNETIC

Instrument

Coil configuration

Coil separation

Accuracy

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency (specify V.L.F. station)

Parameters measured

GRAVITY

Instrument

Scale constant

Corrections made

Base station value and location

Elevation accuracy

INDUCED POLARIZATION

Instrument

Method ☐ Time Domain ☐ Frequency Domain

Parameters – On time Frequency

– Off time Range

– Delay time

– Integration time

RESISTIVITY

Power

Electrode array

Electrode spacing

Type of electrode

APPENDIX 2

INSTRUMENT SPECIFICATIONS

Summary of Important Features of Scintrex IGS Sensors

Magnetics

- 0.1 gamma resolution over 20K to 100K gamma range
- Total field and vertical gradient measurements
- High gradient tolerance
- Same console for portable, base station or mobile survey applications
- Keyboard selectable automatic or manual tuning
- Automatic diurnal correction without a microcomputer

VLF

- Measures both VLF-magnetic and VLF-electric fields
- Values are normalized by the horizontal vector amplitude, to overcome errors due to varying primary field strengths
- Calculates resistivity and phase angle
- Digital tuning to any VLF station
- Automatic measurement of up to three VLF stations
- Automatic tilt compensation
- Signal/noise enhancement through automatic signal stacking
- Automatic gain adjustment
- Optional Primary Field Drift Correction Option permits automatic base station corrections to be made

Electromagnetics

- Processes two frequencies simultaneously for Horizontal Loop and/or Genie amplitude ratio
- Accurate Genie measurements may be made in rough terrain
- Transmitter-receiver separation can be measured electronically
- High levels of noise rejection
- Portable or fixed source transmitters may be used
- The lightweight receive coil may be backpack mounted or set on the ground
- Automatic gain adjustment

A microcomputer such as the IBM PC, Apple IIe, Apple III, HP-85, Osborne, Corona or Compaq can be interfaced with the IGS-2 for archiving or processing data. Scintrex provides assistance with such interfacing.

System	Magnetics Alone			VLF Alone			EM Alone		Typical Combined Systems							
Module	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
IGS-2 System Control Console	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
MP-4 Proton Magnetometer Sensor Option Portable total field	●								●		●	●	●			
MP-4 Proton Magnetometer Sensor Option Portable vertical gradient		●								●				●	●	
MP-4 Proton Magnetometer Sensor Option Base station			●													
VLF-4 VLF Electromagnetic Sensor Portable VLF-magnetic field				●					●	●			●		●	●
VLF-4 VLF Electromagnetic Sensor Portable VLF-magnetic and VLF-electric fields					●											
VLF-4C VLF Electromagnetic Sensor Base station						●										
EM-4 Genie/Horizontal Loop Electromagnetic Sensor Option Genie Mode							●	●			●	●	●	●	●	●
EM-4 Tiltmeter/Intercom Module Horizontal Loop Mode								●				●		●		
EM-4 Genie/Horizontal Loop Expansion Module Three methods: magnetics, VLF, EM													●		●	●

Table indicating different options which may be used with the IGS-2 System Control Console for different ground geophysical survey applications.

Technical Description of the MP-3 Proton Magnetometer

mperatures above 0°C. Weight is 0.9 kg. At 25°C gives 10.000 total field or 6000 total field gradient readings.

chargeable Battery Pack and Charger
ncludes battery holder, 6 rechargeable, n-magnetic, sealed lead-acid bat- ies and charger for installation on console. Best for high sensitivity total field measurements, all gradient mea- ements and operation below 0°C. k weighs 1.3 kg. Nominal capacity is 2.5 Ampere hours. At 25°C gives 7000 total field or 3500 total gradient dings. Charger specifications are: x 95 x 65 mm, 115/230 V AC; 50/60 Hz; 20 VA, overload protected.

avy Duty Rechargeable Battery Pack
udes heavy duty rechargeable bat- es installed in a console with a built-in charger. Used for rapid cycling e station or mobile applications. al weight is 7.6 kg. Nominal capaci- s 12.5 Ampere hours. Dimensions are 240 x 90 x 240 mm. Power re- ements: 115/230 V AC; 50/60 Hz; A. Overload protected.

Low Temperature Battery Extender Kit
Comprises a cover for the bottom of the instrument console, a battery pack cover, a waist belt and a battery cable. Slots on the battery pack cover permit belt mounting next to the operator's body for warmth.

Optional Accessories

Language Options
In addition to English, a second language using Latin characters can replace French.

RS-232 Cable and Adaptor
Includes a special RS-232 data transfer cable and MP-3 to RS-232 cable adaptor. Used for communicating between the MP-3 and peripheral devices including a second MP-3 or IGS-2/MP-4 for diurnal corrections.

Minor Spare Parts Kit
Includes 2 keyboard diaphragms and two fuses.

Carrying Cases
A variety of carrying cases are available to suit different combinations of console and sensor options.

Display Heater
Required for cold weather operation. Powered by main batteries, thermostatically controlled to turn off above -20°C.

MP-3/4 Proton Magnetometer Function Tester
When connected between the console and sensor, applies a signal to test the polarizing circuit, the coil and the signal processing circuitry. Switch selectable magnetic field simulation at 22,500; 30,000; 45,000; 60,000 and 90,000 nT.

Peripheral Devices
Scintrex is prepared to recommend or supply digital printers, modems, cassette tape recorders, analog recorders and microcomputers with software.

Applications Software
Scintrex supplies fully documented software written for the IBM PC computer and certain other microcomputers which use the MS-DOS operating system. This software is designed to permit: 1) archiving of data, 2) processing of magnetic data and 3) profile and contour outputs on digital printers.

Memory Expansion Options

Memory Expansion I
Memory can be added on an existing board to complement the 16K RAM Standard Memory. This can be done in up to six 8K RAM increments to raise system memory to a total of 64K RAM. Each 16K RAM increment holds as many readings as the Standard Memory.

Memory Expansion II
An additional board is required on which an additional sixteen 8K RAM groups can be installed to bring the system total memory to 192K RAM. Each 16K RAM increment holds as many readings as the Standard Memory.

SCINTREX

222 Snidercroft Road
Concord Ontario Canada
L4K 1B5

Telephone: (416) 669-2280
Cable: Geoscint Toronto
Telex: 06-964570

Geophysical and Geochemical
Instrumentation and Services

Technical Description of the MP-3 Proton Magnetometer

Total Field Operating Range
20,000 to 100,000 nT (1 nT = 1 gamma)

Gradient Tolerance
5000 nT/m

Total Field Absolute Accuracy
1 nT at 50,000 nT
2 nT over total field operating range

Resolution
0.1 nT

Tuning
Fully solid-state. Manual or automatic keyboard selectable.

Fastest Cycle Time
2 seconds. For portable readings this is the time taken from the push of a button to the display of the measured value.

Continuous Cycle Times
Keyboard selectable in 1 second increments upwards from 2 seconds to 999 seconds.

Operating Temperature Range
-40°C to +50°C provided optional Display Heater is used below -20°C.

Digital Display
32 character, 2 line LCD display

Keyboard Input
21 keys for entering all commands, coordinates, header and ancillary information.

Languages
English plus French is standard.

Clock
Real time clock with day, month, year, hour, minute and second. Needs keyboard initialization only after battery replacement. One second resolution, ±1 second stability over 12 hours.

Standard Memory
16K RAM internal solid-state memory in single reading mode records up to 1175 total field and gradient observations, or 1350 total field measurements including coordinates, time and header information. In continuous cycle mode, records up to 8000 total field measurements including time and header information.

Digital Data Output
RS-232C serial interface for digital printer, modem, microcomputer, cassette tape recorder, a second MP-3 or an IGS-2/MP-4. Data outputs in 7 or 8 bit ASCII, one start, two stop bits, no parity format. Baud rate is keyboard selectable at 110, 300, 600 and 1200 baud. Carriage return delay is keyboard selectable in increments of one from 0 to 999. Handshaking is done through X-on/X-off protocol.

Analog Output
For a strip chart recorder. 0 to 999 mV full scale with keyboard selectable sensitivities of 10, 100 or 1000 nT full scale.

Trigger Output
Allows MP-3 to act as master for other instrumentation.

Console Dimensions
240 x 90 x 240 mm includes mounted battery pack.

Weight
2.4 kg excludes batteries.

Power Requirements
Can be powered by external 12 V DC or one of the Battery Pack Options listed below.

Sensor Options

In the following options the actual sensors are identical, however, mountings and cables vary.

Portable Total Field Sensor Option
Includes sensor, staff, one short cable, one long cable and backpack sensor harness. Weight of sensor, cable and staff is 1.9 kg. Staff comprises four 0.5 m sections of 25 mm diameter aluminum tubing.

Base Station Sensor Option
Includes sensor, tripod, 50 m cable, external power cable and analog chart recorder cable. Weight of sensor, cable and tripod is 6.5 kg. Tripod is 530 mm collapsed, 1500 mm extended.

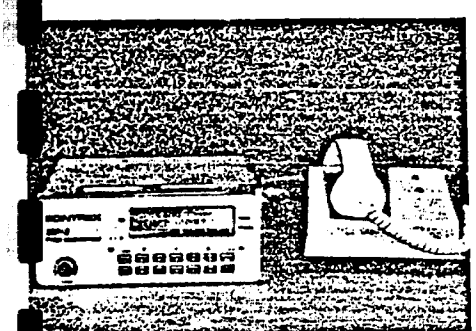
Gradiometer Sensor Option
For use with the Portable Total Field Sensor Option. Includes second sensor, cables and two 0.5 m staff extenders. Combined weight of Total Field and Gradiometer Sensor options with staff, 1 m extender and cables is 3.5 kg.

Marine Sensor Option
Includes sensor installed in a fish with cable up to 100 m in length.

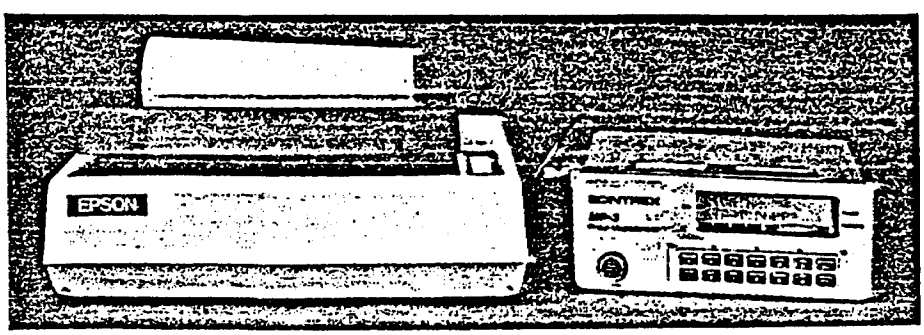
Airborne Sensor Option
Includes sensor installed in a 'bird' with a tow cable or in a 'stinger' mounted on the aircraft.

Battery Pack Options

Non-rechargeable Battery Pack
Includes battery holder and 10 disposable 'C' cell batteries for installation on console. Nominal capacity is 4.0 Ampere hours. Used in low sensitivity total field magnetometry in



With the use of a modem the MP-3 can send its data across telephone lines.



The MP-3 outputs directly to a digital printer.

Ontario

Ministry of Northern Develop and Mines

Ministère du Développement du Nord et des Mines

42A01SE0176 2.10711 EBY

900

February 8, 1988

Your File: 449/87
Our file: 2.10711

Mining Recorder
Ministry of Northern Development and Mines
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

RE: Notice of Intent dated January 22, 1988
Geophysical (Magnetometer) Survey submitted on
Mining Claims L 735464 et al in the Township of Eby

The assessment work credits, as listed with the above-mentioned Notice of Intent, have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

W.R. Cowan, Manager
Mining Lands Section
Mines and Minerals Division

Whitney Block, Room 6610
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

RM
RM:pl
Enclosure: Technical Assessment Work Credits

cc: Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

Resident Geologist
Kirkland Lake, Ontario

Butte Canyon Resources Incorporated
Suite 500
67 Richmond Street West
Toronto, Ontario
M5H 1Z5

Ministry of Northern Development and Mines

Ontario

Technical Assessment Work Credits

File 2.10711

Date January 22, 1988

Mining Recorder's Report of Work No. 449/87

Recorded Holder: Butte Canyon Resources Inc.

Township ~~or Area~~: Eby

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	L 735464
Electromagnetic _____ days	735596 to 598 inclusive
Magnetometer 40 days	738544 to 545 inclusive
Radiometric _____ days	738548
Induced polarization _____ days	738577
Other _____ days	802124 to 126 inclusive
Section 77 (19) See "Mining Claims Assessed" column	842693 to 695 inclusive
Geological _____ days	891900 to 902 inclusive
Geochemical _____ days	891905
Man days ☐ Airborne ☐	891907
Special provision ☒ Ground ☒	891909
☐ Credits have been reduced because of partial coverage of claims.	980065 to 069 inclusive
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

20 Days Magnetometer	30 Days Magnetometer
L 738858	L 738546 to 547 inclusive
891906	891903
891908	

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☐ insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

626 (85/12)

LAND MANAGEMENT

Ministry of Natural Resources — Ontario

Report of Work (Geophysical, Geological, Geochemical and Expenditures)

File #449/87 REVISED 2.10711

The Mining Act

Instructions: – Please type or print.
– If number of mining claims traver exceeds space on this form, attach a
Note: – Only days credits calculated in "Expenditures" section may be ente in the "Expend. Days Cr." colun
– Do not use shaded areas below.

Type of Survey(s)	Township or Area
Magnetic Survey (Revised)	Eby Township

Claim Holder(s)	Prospector's Licence No.
Butte Canyon Resources Incorporated	T4886.

Address: Suite 500, 67 Richmond St W. TORONTO, ONT. M5H 1Z5

Survey Company	Date of Survey, (from & to) Day / Mo. / Yr.	Geophysics Day / Mo. / Yr.	Total Miles of line Cut
Derry, Michener, Booth & Wahl	15 / 10 / 87	31 / 10 / 87	

Name and Address of Author (of Geo-Technical report): R.W. Woolham 20 Richmond St. East, TORONTO, ONT. M5C 2R9

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical	
	- Electromagnetic	
	- Magnetometer	40
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	revised
	- Other	
	Geological	
	Geochemical	

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

RECEIVED JAN 12 198[illegible]

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	9.35cm	
	Electromagnetic	
	Magnetometer	-
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	735464	
	735596	
	597	
	598	
	738544	
	545	
	546	
	547	
	548	
	577	
	858	
	802124	
	125	
	126	
	892693	
	694	
	695	
	891900	
	901	
	902	
	903	
	905	
	906	

Mining Claim Prefix	Mining Claim Number	Exper Days
L	891907	
	908	
	909	
	980065	
	066	
	067	
	068	
	069	

Total number of mining claims covered by this report of work: 31

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures $ ____ + 15 = Total Days Credits ____

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Revised Jan. 7/88 R.W. Woolham

Date	Recorded Holder or Agent (Signature)
NOV 13/87	R.W. Woolham

For Office Use Only		
Total Days Cr. Recorded	Date Recorded	Mining Recorder
1240	Jan. 12/88	for D. Beattie
	Date Approved as Recorded	Branch Director
	See reverse	statement

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying: R.W. WOOLHAM, Suite 410, 20 Richmond St. E TORONTO, ONT. M5C 2R9

Date Certified	Certified by (Signature)
NOV 13/87	R.W. Woolham

1362 (81/9)

Grenfell Twp. M.351

Burt Twp. M.334

Otto Twp. M.379

Blain Twp. M.418

M.N.R. FILE 16864

VI

V

IV

III

II

I

12 11 10 9 8 7 6 5 4 3 2 1

L.U.P. Hydro Line

Crooked

Transmission Line

Gravel Pit 1210

Gravel File 84569

THE TOWNSHIP OF

EBY

DISTRICT OF TIMISKAMING

LARDER LAKE MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

PATENTED LAND	P
CROWN LAND SALE	C.S.
LEASES	L
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	C.
CANCELLED	

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

AREAS WITHDRAWN FROM STAKING
under Sec. 43 of The Mining Act (R.S.O. 1970).

Order No.	File	Date	Disposition

Nꝉ Lot 7, Con. 3 - Cert. of Forfeiture - Sept 17/85

ISSUE
1987

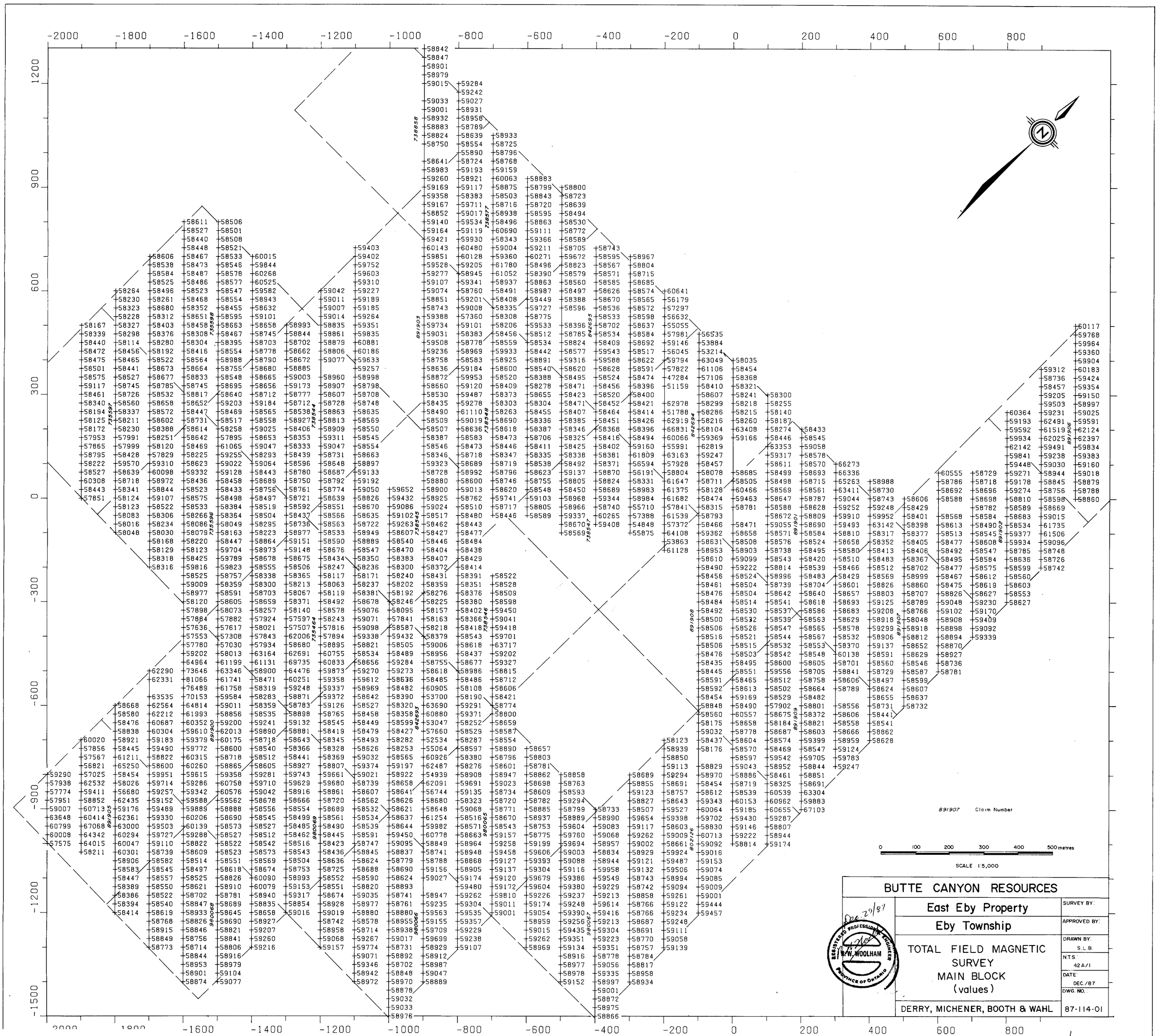
#1

PLAN NO.- M-345

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

42A01SE0176 2.10711 EBY

200



BUTTE CANYON RESOURCES

East Eby Property

Eby Township

TOTAL FIELD MAGNETIC SURVEY
MAIN BLOCK
(values)

DERRY, MICHENER, BOOTH & WAHL

SURVEY BY:

APPROVED BY:

DRAWN BY: S.L.B.

N.T.S.: 42A/1

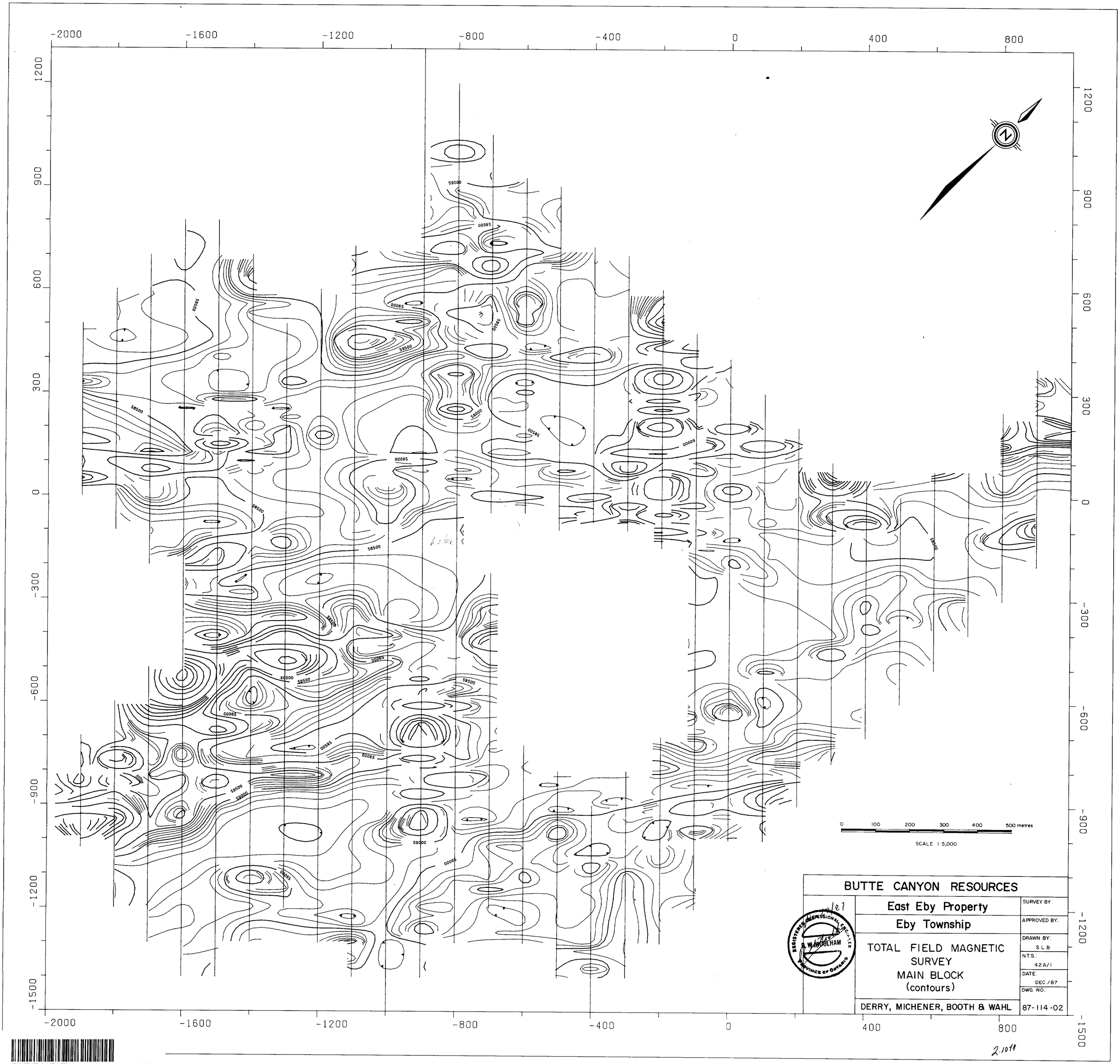
DATE: DEC./87

DWG. NO.: 87-114-01

Dec. 29/87

REGISTERED PROFESSIONAL ENGINEER
R.W. WOOLHAM
PROVINCE OF ONTARIO

2.10711

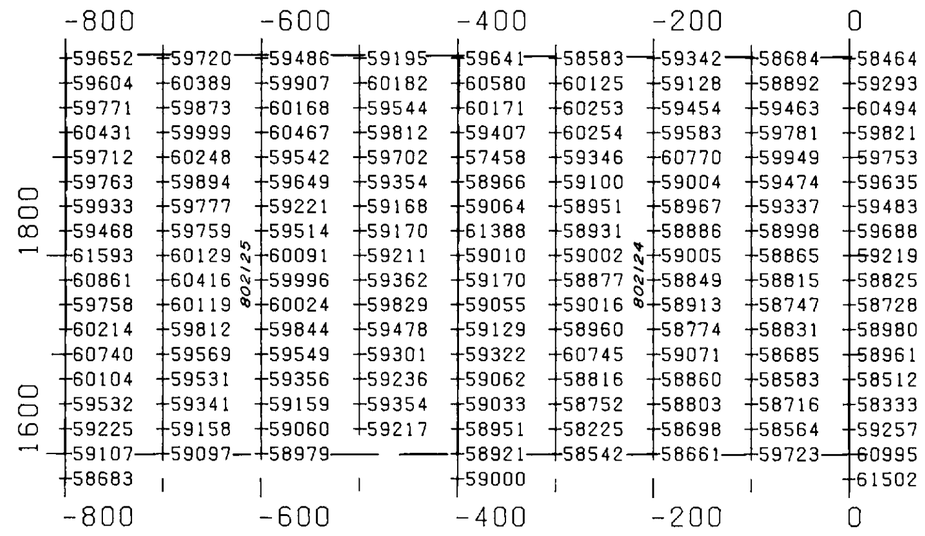


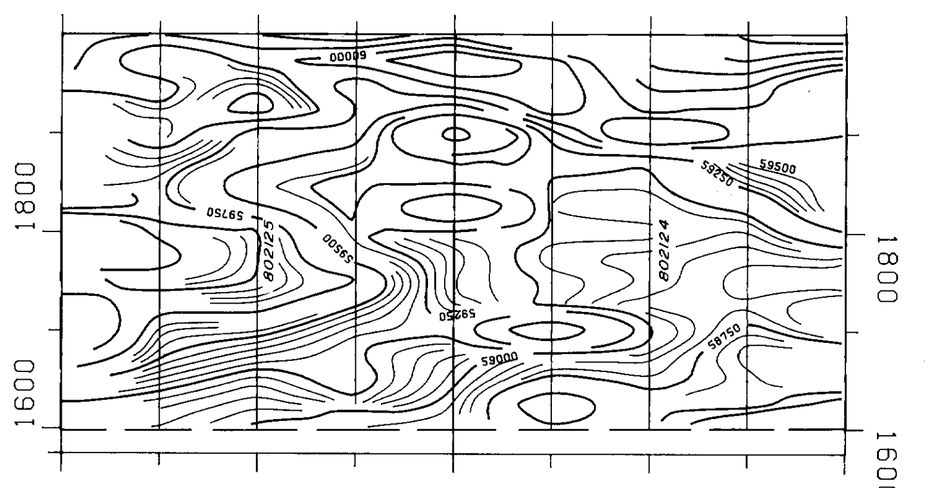
BUTTE CANYON RESOURCES

East Eby Property	SURVEY BY:
Eby Township	APPROVED BY:
TOTAL FIELD MAGNETIC SURVEY MAIN BLOCK (contours)	DRAWN BY: S.L.B N.T.S.: 42A/1 DATE: DEC./87 DWG. NO.
DERRY, MICHENER, BOOTH & WAHL	87-114-02

REGISTERED PROFESSIONAL ENGINEER R. W. WOOLHAM PROVINCE OF ONTARIO

2.1011





802/124 Claim Number

0 100 200 300 400 500 metres

SCALE 1:5,000

BUTTE CANYON RESOURCES		
29/87	East Eby Property	SURVEY BY:
	Eby Township	APPROVED BY:
	TOTAL FIELD MAGNETIC SURVEY NORTH BLOCK (values, contours)	DRAWN BY: S.L.B. N.T.S.: 42A/1 DATE: DEC./87 DWG. NO.:
	DERRY, MICHENER, BOOTH & WAHL	87-114-03

REGISTERED PROFESSIONAL ENGINEER R.W. WOOLHAM PROVINCE OF ONTARIO

2.10711